

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number  
**WO 2005/043911 A1**

(51) International Patent Classification<sup>7</sup>: **H04N 7/173**

(21) International Application Number:  
PCT/KR2004/002817

(22) International Filing Date:  
3 November 2004 (03.11.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:  
10-2003-0077604  
4 November 2003 (04.11.2003) KR

(71) Applicant (for all designated States except US): **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE** [KR/KR]; 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIM, Sung-Hoon** [KR/KR]; #203-304 Galma Apt., Galma-dong, Seo-gu, Daejeon 302-755 (KR). **BANG, Gun** [KR/KR]; #205, 119-4, Sinseong-dong, Yuseong-gu, Daejeon 305-804

(KR). **KIM, Seung-Won** [KR/KR]; #109-1804 Narae Apt., Jeonnim-dong, Yuseong-gu, Daejeon 305-729 (KR). **CHOI, Jin-Soo** [KR/KR]; #402, 301-6, Jangdae-dong, Yuseong-gu, Daejeon 305-308 (KR). **LEE, Soo-In** [KR/KR]; #106-606 Clover Apt., Dunsan-dong, Seo-gu, Daejeon 302-120 (KR). **KIM, Jin-Woong** [KR/KR]; #305-1603 Expo Apt., Jeonmin-dong, Yuseong-gu, Daejeon 305-761 (KR).

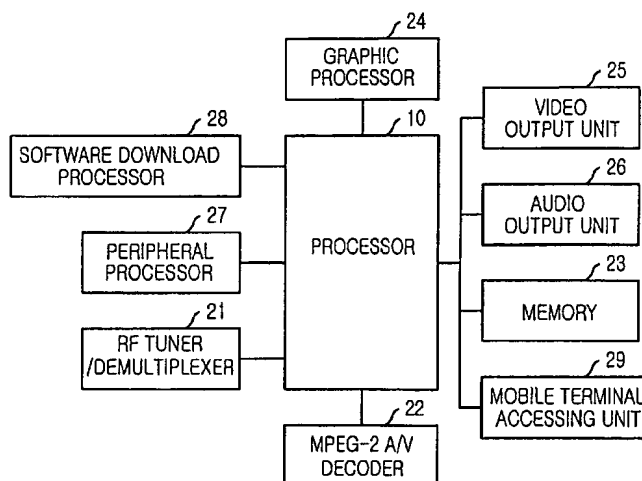
(74) Agent: **SHINSUNG PATENT FIRM**; 2F, Line Bldg., 823-30, Yeoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR RECEIVING DATA BROADCASTING SERVICE TO SUPPORT CONNECTION WITH MOBILE NETWORKS



(57) Abstract: Provided are a data broadcast receiving apparatus that can be easily connected with mobile communication terminals of diverse access specifications by easily upgrading middleware or plug-in software in digital broadcast mobile and fixed receiving environments, and a method thereof. The data broadcast receiving apparatus includes a demultiplexer for separating signals transmitted from the outside into signals of a kind; a controller for controlling elements of the data broadcast receiving apparatus, receiving and outputting contents separated in the demultiplexer; a download processor for receiving downloadable data divided in the demultiplexer, determining the kind of the downloadable data, and performing upgrade by downloading the downloadable data; and a mobile terminal accessing unit for accessing to a mobile communication network based on the downloadable data.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*